WHAT IS CLAIMED IS:

1. An amplifying solid-state imaging device comprising:

a plurality of pixels arranged in columns and rows, each said pixel including a signal storage section for creating signal charge through photoelectric conversion and storing thereon signal information corresponding to the signal charge;

reset signal supply means for generating a reset signal for an electronic shuttering operation and supplying the reset signal to the pixels belonging to one of the rows that has been selected to perform the electronic shuttering operation thereon, thereby resetting the signal storage sections included in the pixels on the selected row;

row selecting means for sequentially selecting at least one row of pixels from the pixels to perform a signal readout operation thereon; and

a signal detector for reading out the signal information, which is stored in the signal storage sections included in the pixels on the row that has been selected by the row selecting means to perform the signal readout operation thereon, the signal detector including an amplifier that is connected in series between first and second power supplies, the signal detector sensing the signal information by making a current flow between the first and second power supplies, amplifying the signal information and then outputting the amplified signal information,

wherein a period during which the reset signal supply means is supplying the reset signal to an arbitrary one of the pixel rows overlaps with a period during which the row selecting means is selecting another one of the pixel rows to perform the readout operation thereon.

2. The amplifying solid-state imaging device of Claim 1, wherein the amplifier of the signal detector comprises: drivers provided for the respective pixels; and load devices provided for the respective pixel columns.

3. The amplifying solid-state imaging device of Claim 2, wherein each said driver is a transistor comprising: a gate electrode connected to associated one of the signal storage sections; a drain connected to the first power supply; and a source connected to associated one of the load devices.

4. The amplifying solid-state imaging device of Claim 2, wherein each said driver and associated one of the load devices together form a source follower circuit.

5. The amplifying solid-state imaging device of Claim 1, wherein each said signal storage section comprises: a photodiode for performing photoelectric conversion; a capacitor for storing thereon charge created by the

photodiode; and a transistor for electrically connecting or disconnecting the photodiode to/from the capacitor.

6. An amplifying solid-state imaging device comprising:

a plurality of pixels arranged in columns and rows, each said pixel including a signal storage section for creating signal charge through photoelectric conversion and storing thereon signal information corresponding to the signal charge;

reset signal supply means for generating a reset signal for an electronic shuttering operation and supplying the reset signal to the pixels belonging to one of the rows that has been selected to perform the electronic shuttering operation thereon, thereby resetting the signal storage sections included in the pixels on the selected row;

row selecting means for sequentially selecting at least one row of pixels from the pixels to perform a signal readout operation thereon; and

a signal detector for reading out the signal information, which is stored in the signal storage sections included in the pixels on the row that has been selected by the row selecting means to perform the signal readout operation thereon, the signal detector including an amplifier that is connected in series between first and second power supplies, the signal detector sensing the signal information by making a current flow between the first and second power

supplies, amplifying the signal information and then outputting the amplified signal information,

wherein the number of the pixel rows is equal to an HD number, which is the number of horizontal sync signals included in one frame interval.

7. The amplifying solid-state imaging device of Claim 6, wherein the pixels are classified into a group of imaging pixels that are provided within an effective pixel area and a group of dummy pixels that are provided in an area other than the effective pixel area, and

wherein the number of pixel rows formed by the group of dummy pixels is obtained by subtracting the number of pixel rows formed by the group of imaging pixels from the number of the horizontal sync signals included in one frame interval.

8. The amplifying solid-state imaging device of Claim 6, wherein the amplifier of the signal detector comprises: drivers provided for the respective pixels; and load devices provided for the respective pixel columns.

9. The amplifying solid-state imaging device of Claim 8, wherein each said driver is a transistor comprising: a gate electrode connected to associated one of the signal storage sections; a drain connected to the first power supply; and a

source connected to associated one of the load devices.

10. The amplifying solid-state imaging device of Claim 8, wherein each said driver and associated one of the load devices together form a source follower circuit.

11. The amplifying solid-state imaging device of Claim 6, wherein each said signal storage section comprises: a photodiode for performing photoelectric conversion; a capacitor for storing thereon charge created by the photodiode; and a transistor for electrically connecting or disconnecting the photodiode to/from the capacitor.

12. An amplifying solid-state imaging device comprising:

a plurality of pixels arranged in columns and rows, each said pixel including a signal storage section for creating signal charge through photoelectric conversion and storing thereon signal information corresponding to the signal charge;

reset signal supply means for generating a reset signal for an electronic shuttering operation and supplying the reset signal to the pixels belonging to one of the rows that has been selected to perform the electronic shuttering operation thereon, thereby resetting the signal storage sections included in the pixels on the selected row;

row selecting means for sequentially selecting at least

one row of pixels from the pixels to perform a signal readout operation thereon; and

a signal detector for reading out the signal information, which is stored in the signal storage sections included in the pixels on the row that has been selected by the row selecting means to perform the signal readout operation thereon, the signal detector including an amplifier that is connected in series between first and second power supplies, the signal detector sensing the signal information by making a current flow between the first and second power supplies, amplifying the signal information and outputting the amplified signal information,

wherein the pixels are classified into a group of imaging pixels that are provided within an effective pixel area and at least one row of dummy pixels that are provided in an area other than the effective pixel area, and

wherein the imaging device further comprises dummy row selecting means for getting a pseudo signal readout operation performed repeatedly on the dummy pixel row after one of the rows of pixels included in the group of imaging pixels has been selected by the row selecting means during a frame interval and before a next frame interval begins.

13. The amplifying solid-state imaging device of Claim 12, wherein the amplifier of the signal detector comprises:

drivers provided for the respective pixels; and load devices provided for the respective pixel columns.

14. The amplifying solid-state imaging device of Claim 13, wherein each said driver is a transistor comprising: a gate electrode connected to associated one of the signal storage sections; a drain connected to the first power supply; and a source connected to associated one of the load devices.

15. The amplifying solid-state imaging device of Claim 13, wherein each said driver and associated one of the load devices together form a source follower circuit.

16. The amplifying solid-state imaging device of Claim 12, wherein each said signal storage section comprises: a photodiode for performing photoelectric conversion; a capacitor for storing thereon charge created by the photodiode; and a transistor for electrically connecting or disconnecting the photodiode to/from the capacitor.

17. An amplifying solid-state imaging device comprising:

a plurality of pixels arranged in columns and rows, each said pixel including a signal storage section for creating signal charge through photoelectric conversion and storing thereon signal information corresponding to the signal charge;

reset signal supply means for generating a reset signal for an electronic shuttering operation and supplying the reset signal to the pixels belonging to one of the rows that has been selected to perform the electronic shuttering operation thereon, thereby resetting the signal storage sections included in the pixels on the selected row;

row selecting means for selecting at least one row of pixels from the pixels to perform a signal readout operation thereon; and

a signal detector for reading out the signal information, which is stored in the signal storage sections included in the pixels on the row that has been selected by the row selecting means to perform the signal readout operation thereon, the signal detector including an amplifier that is connected in series between first and second power supplies, the signal detector sensing the signal information by making a current flow between the first and second power supplies, amplifying the signal information and then outputting the amplified signal information,

wherein the pixels are classified into a group of imaging pixels that are provided within an effective pixel area and at least one row of dummy pixels that are provided in an area other than the effective pixel area, and

wherein the imaging device further comprises dummy row selecting means, which selects the dummy pixel row in a

period overlapping with a period during which the reset signal for the electronic shuttering operation is being supplied to one row of pixels included in the group of imaging pixels, while no row of pixels included in the group of imaging pixels is being selected by the row selecting means, thereby getting a pseudo signal readout operation performed repeatedly on the dummy pixel row.

18. The amplifying solid-state imaging device of Claim 17, wherein the amplifier of the signal detector comprises: drivers provided for the respective pixels; and load devices provided for the respective pixel columns.

19. The amplifying solid-state imaging device of Claim 18, wherein each said driver is a transistor comprising: a gate electrode connected to associated one of the signal storage sections; a drain connected to the first power supply; and a source connected to associated one of the load devices.

20. The amplifying solid-state imaging device of Claim 18, wherein each said driver and associated one of the load devices together form a source follower circuit.

21. The amplifying solid-state imaging device of Claim 17, wherein each said signal storage section comprises: a

photodiode for performing photoelectric conversion; a capacitor for storing thereon charge created by the photodiode; and a transistor for electrically connecting or disconnecting the photodiode to/from the capacitor.

22. An amplifying solid-state imaging device comprising a number m of pixel rows, where m is equal to or larger than two,

wherein the device further includes at least one dummy pixel row, and

wherein while a reset signal for an electronic shuttering operation is being supplied to an i^{th} row that has been selected from the number m of pixel rows, a readout operation is selectively performed on either an n^{th} row that has also been selected from the number m of pixel rows or the dummy pixel row, where $1 \leqq i \leqq m$, $1 \leqq n \leqq m$ and $n \neq i$.

23. A method for driving an amplifying solid-state imaging device including: a number m of pixel rows provided within an effective pixel area, where m is equal to or larger than two; and at least one dummy pixel row provided in an area other than the effective pixel area,

wherein while a reset signal for an electronic shuttering operation is being supplied to an i^{th} row that has been selected from the number m of pixel rows, a readout

operation is always performed selectively on either an n^{th} row that has also been selected from the number m of pixel rows or the dummy pixel row, where $1 \leqq i \leqq m$, $1 \leqq n \leqq m$ and $n \neq i$.

24. The method of Claim 23, comprising the steps of:

sequentially selecting the number m of pixel rows provided within the effective pixel area to perform the readout operation thereon; and

supplying the reset signal for the electronic shuttering operation to each said pixel row that has been selected from the number m of pixel rows provided within the effective pixel area to perform the readout operation thereon after a predetermined time has passed since the readout operation was performed.

25. The method of Claim 23, wherein the dummy pixel row is selected to perform the readout operation thereon between a point in time the last m^{th} row within the effective pixel area is selected and a point in time the reset signal for the electronic shuttering operation is supplied to the last m^{th} row within the effective pixel area.